

GPS Jammer Detection and Gelocation using CoNNeCT L-Band SDR, Phase I

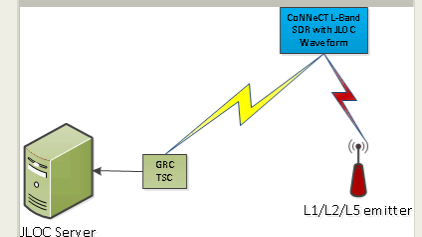
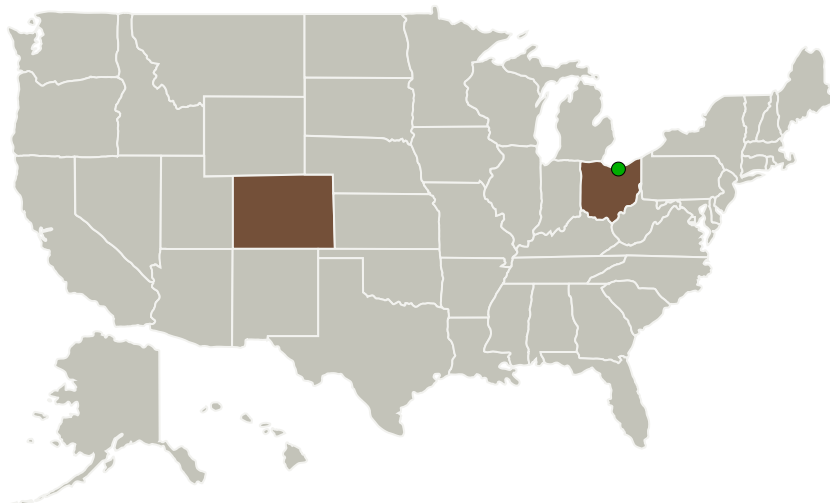
Completed Technology Project (2013 - 2013)



Project Introduction

Under this proposed effort, we plan to test the feasibility of adapting our terrestrial jammer locator system (JLOC) to locating jamming signals in space by adapting our previously developed GPS software defined radio (SDR) technology to provide an SDR waveform that can operate on spacecraft to allow detection and identification of GPS interference. We shall also experiment with this waveform to determine how the motion of a low earth orbiting platform can be used to provide geolocation of the interference source.

Primary U.S. Work Locations and Key Partners



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Organizations Performing Work	Role	Type	Location
Navsys Corp	Lead Organization	Industry	Colorado Springs, Colorado
● Glenn Research Center(GRC)	Supporting Organization	NASA Center	Cleveland, Ohio

Primary U.S. Work Locations

Colorado	Ohio
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Project Transitions

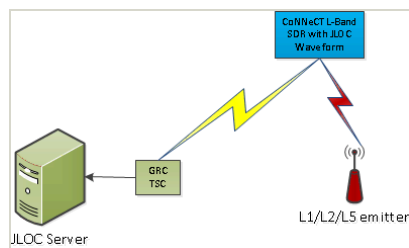
May 2013: Project Start

November 2013: Closed out

Closeout Documentation:

- Final Summary Chart(<https://techport.nasa.gov/file/138185>)

Images



Project Image

GPS Jammer Detection and Gelocation using CoNNeCT L-Band SDR

(<https://techport.nasa.gov/image/128527>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

Navsys Corp

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

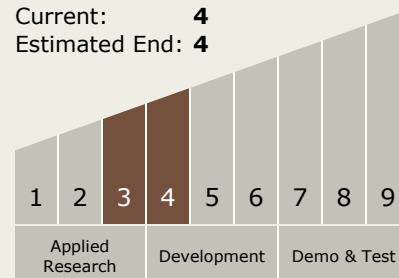
Carlos Torrez

Principal Investigator:

Alison K Brown

Technology Maturity (TRL)

Start: **3**
Current: **4**
Estimated End: **4**



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Technology Areas

Primary:

- TX17 Guidance, Navigation, and Control (GN&C)
 - └ TX17.2 Navigation Technologies
 - └ TX17.2.3 Navigation Sensors

Target Destinations

The Moon, Mars, Outside the Solar System, The Sun, Earth, Others Inside the Solar System